

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDHYD0C3G0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Phacelia parishii*

COMMON NAME: Parish's Phacelia, Parish Scorpionweed

SYNONYMS:

FAMILY: Hydrophyllaceae

AUTHOR, PLACE OF PUBLICATION: A. Gray, Proc. Amer. Acad. Arts. 19: 88. 1883.

TYPE LOCALITY: United States of America, California, Dry alkaline lake near Rabbit Springs, Mohave Desert.

TYPE SPECIMEN: HT: GH-56946. S.B. Parish 1314 with W.F. Parish, May 1882. IT: DS(CAS), F, MO, NY, US.

TAXONOMIC UNIQUENESS: Species *parishii* is 1 of 158 species in the genus *Phacelia*.

DESCRIPTION: Low growing annual 5-15 cm (2-6 in) tall with stems branched at or near the base and more or less spreading; stems 15 cm (6 in) long, glandular-puberulent. Leaves chiefly basal, 1-3 cm long, 0.5-2 cm wide, fleshy, elliptic to obovate, entire to coarsely toothed; blade > petiole. Flowers small (4-6 mm long) and inconspicuous, barely surpassing the calyx, corolla is bell-shaped with lavender tube and yellow base; calyx with broad oblanceolate segments; stamens 2-4 mm, sparsely short-hairy; style 1-2 mm. Fruit 3-5 mm, oblong, short-hairy, surpassed by the calyx; seeds 20-40, pitted-reticulate, 1-1.5 mm long.

AIDS TO IDENTIFICATION: Distinguished from similar species by its spreading habit, chiefly basal, elliptic leaves, and broad calyx lobes. *Phacelia lemmonii* (Lemmon's scorpion-weed) has elliptic, cauline leaves with narrow calyx lobes and an erect habit; *P. rotundifolia* (round-leaf scorpion-weed) has rounded-cordate, cauline leaves with an erect habit; *P. pulchella* (beautiful scorpion-weed) has broadly elliptic, cauline leaves and large, showy flower. (Anderson 1999).

ILLUSTRATIONS: Line drawing (Cronquist et al., 1984: 171).

Color photo of Isotype specimen (NY-57337, in

<http://207.156.243.8/emu/vh/specimen.php?irn=430255>)

Color photo of Isotype specimen (US-47071, in

<http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=>)

Color photos of plant and habitat (Margaret Williams, Nevada Native

Plant Society, in <http://plants.usda.gov>)

Color photo (David A. Charlet 2004, in CalPhotos at http://elib.cs.berkeley.edu/cgi/img_query)

Color photos (Thomas M. Elder 2004, in CalPhotos at http://elib.cs.berkeley.edu/cgi/img_query)

TOTAL RANGE: California (San Bernardino Co.), Nevada (Clark, Lincoln, Nye, and White Pine counties), and Arizona (Mohave and Yavapai counties).

RANGE WITHIN ARIZONA: Hualapai Valley in Mohave Co. and Burro Creek in Yavapai Co.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Annual herb.

PHENOLOGY: Flowers and fruits from April to May, sometimes June.

BIOLOGY:

HABITAT: Alkaline playas in the desert, and sometimes on barren, alkaline knolls, where it may be more leafy-stemmed (Cronquist et al., 1984). Clay or alkaline soils, dry lake margins (Hickman, Ed., 1993). Edge of barren playa surrounded by semi-desert grassland and Mohave Desert; gypsum beds in lacustrine deposits of the Sonoran Desert (Anderson 1999). At Burro Creek it occurs on edaphic islands with other rare plants, *Purshia subintegra* and *Astragalus newberryi* var. *quarii* (Anderson 1999).

ELEVATION: 2,300 - 2,800 ft. (700-850 m). Hickman (1993) reports elevation in California from 2,623-3,935 ft (800-1200 m).

EXPOSURE:

SUBSTRATE: Barren playa; gypsum beds in lacustrine deposits.

PLANT COMMUNITY: Playa surrounded by semi-desert grassland and Mohave Desert; also Sonoran Desert. In the Mohave Desert (Mohave Co.) of Arizona, this species is associated with *Allium bigelovii* (Bigelow's onion), *Atriplex argentea* (Silvery saltbush), *A. canescens* (four-wing saltbush), *Bromus rubens* (Foxtail Brome), *Canotia holacantha* (Crucifixion-thorn), *Chaenactis carphoclinia* (Straw-bed pincushion), *C. fremontii* (Fremont's pincushion), *Cordylanthus* (bird's-beak), *Cryptantha cinerea* (James cat's-eye), *Eriogonum depressum* (=E.o. var. *depressum*, cushion wild buckwheat), *Monolepis nuttalliana* (Nuttall's poverty-weed), and stunted *Prosopis velutina* (velvet mesquite); and in the Arizona Upland Subdivision of Sonoran Desert (Yavapai Co.), it is associated with *Allium bigelovii*, *Arenaria*

eastwoodiae (Eastwood sandywort), *Astragalus amphioxys* (a milk-vetch), *A. newberryi* var. *aquarii*, *Chaenactis fremontii*, *Eriogonum depressum*, *Monolepis nuttalliana*, and *Streptanthus cordatus* (Perennial twistflower). (USDI, BLM 1993 and 1995; SEINet accessed 2005). In Nevada, associated with Big sagebrush, and greasewood-saltbush.

POPULATION TRENDS: The global short term trend is declining according to a 2001 personal communication with NatureServe (2005).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Bureau of Land Management Sensitive
(USDI, BLM 2000, 2005, 2008)

MANAGEMENT FACTORS: In California, the species is threatened by military activities and by the potential expansion of a fort (CNPS 2001, in NatureServe 2005). Tank use could damage spoils and subsurface hydrology.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: BLM - Kingman Field Office; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

Revised: 2002-03-22 (SMS)
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